## **EAST Search History**

| Ref<br># | Hits  | Search Query   | DBs                                       | Default<br>Operator | Plurals | Time Stamp       |
|----------|-------|--|---|---------------------|---------|------------------|
| L9       | 4818  | plug same resilient same rigid                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 15:37 |
| L10      | 1243  | plug and resilient with slit   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 15:38 |
| L11      | 586   | plug same (resilient or elastomeric)<br>with slit                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 15:38 |
| L12      | 20237 | (plug or pig) same (longitudinal\$3 or axial\$3) with (slit or slot) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 15:38 |
| L13      | 227   | (wellbore pipeline) and L12  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 15:38 |
| L14      | 109   | 9 and (L10 L11 L13)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 15:39 |
| S1       | 7     | ("1683429" "20010047811" "3605159"<br> "5966768").PN.                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 10:00 |
| S2       | 386   | 166/153.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 10:07 |
| S6       | 1     | "20060266512".pn.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 10:18 |
| S7       | 2945  | 166/105,207,153,101,99,127,135,195.<br>ccls.                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 12:36 |
| S8       | 1243  | plug and resilient with slit   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR                  | ON      | 2007/07/09 10:19 |

## **EAST Search History**

| S9  | 586   | plug same (resilient or elastomeric)   | US-PGPUB;                                 | OR | ON | 2007/07/09 10:49 |
|-----|-------|--|---|----|----|------------------|
| 59  | 300   | with slit  | USPAT;<br>USOCR;<br>EPO; JPO              | OK | ON | 2007/07/09 10.49 |
| S10 | 20237 | (plug or pig) same (longitudinal\$3 or axial\$3) with (slit or slot)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR | ON | 2007/07/09 10:49 |
| S11 | 227   | (wellbore pipeline) and S10  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR | ON | 2007/07/09 15:38 |
| S12 | 4     | ("1683429").URPN.  | USPAT                                     | OR | ON | 2007/07/09 11:22 |
| S13 | 40    | ("0049416"   "0343769"   "0738289"   "0979121"   "1060163"   "1623843"   "1683429"   "1741899"   "1747933"   "2285779"   "2450486"   "3115163"   "3120246"   "3619844"   "3665966"   "4040450").PN. OR ("4202377").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 11:23 |
| S14 | 62    | ("0864544"   "1547440"   "1597850"   "1668438"   "1673890"   "1683429"   "1713895"   "1795348"   "2170997"   "3425083"   "3460180"   "3474479"   "3939519"   "4077079"   "4079782"   "4124065"   "4244072"   "4283807"   "4297147"   "4350202"   "4353414"   "4383346"   "4390058"   "4406031"   "4420038"   "4435872"   "4476917"   "4538316"   "4556102"   "4566533"   "4709719"   "4830099"   "5010950"   "5153963"   "5176199"   "5186815"   "5213623"   "5358573"   "5379475"   "5431545"   "5473787"   "5592990"   "5607513"   "5630471"   "5647428"   "5685041"   "5882428"   "6079074"   "6409843").PN. OR ("6569255").URPN. | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 11:24 |
| S15 | 4     | ("1673890").URPN.  | USPAT                                     | OR | ON | 2007/07/09 11:25 |
| S16 | 3     | ("1668438").URPN.  | USPAT                                     | OR | ON | 2007/07/09 11:26 |
| S17 | 18    | ("1597850"   "1668438"   "3616113"   "3651530"   "3819514"   "3888768"   "3946455"   "4556102"   "4569097"   "4733718"   "5473787"   "5630471"   "5983994"   "6014789"   "6272713"   "6530427").PN. OR ("6945316").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 11:28 |
| S18 | 22    | ("2258174"   "2539354"   "4336074"  <br>"4406030"   "4550466"   "5105498").<br>PN. OR ("6272713").URPN.  | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 11:28 |
| S19 | 7     | ("864544").URPN.   | USPAT                                     | OR | ON | 2007/07/09 11:33 |
| S20 | 13    | ("1547440").URPN.  | USPAT                                     | OR | ON | 2007/07/09 11:37 |

## **EAST Search History**

| S21 | 24   | ("1415600"   "1547440"   "1713895"  <br>"3403701"   "3543323"   "3602934").<br>PN. OR ("3725968").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 11:38 |
|-----|------|---|---|----|----|------------------|
| S22 | 16   | ("1994072"   "2392144"   "2433828"  <br>"2509922"   "2567475"   "3561534"  <br>"3725968"   "4612986"   "4896720"  <br>"5570742").PN. OR ("6523612").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 11:39 |
| S23 | 59   | ("1342618"   "1392105"   "1598771"   "1713895"   "1855046"   "2190145"   "2334788"   "2392144"   "2447966"   "2509922"   "2567475"   "2695673"   "2715552"   "3176772"   "3541628"   "3827492"   "4164980"   "4345350"   "4427065"   "4438812"   "4501322"   "4548271"   "4612986"   "4720884"   "4747452"   "4809779"   "4896720"). PN. OR ("5570742").URPN. | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 11:39 |
| S24 | 7    | ("5002139"   "5419397"   "5570742"  <br>"5819353"   "6279962"   "D436237").<br>PN. OR ("6575239").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 11:40 |
| S25 | 12   | ("3032114"   "3827492"   "4438812"  <br>"4501322"   "5002139"   "5570742"  <br>"5711046"   "5819353"   "5829521"  <br>"5947203").PN. OR ("D436237").<br>URPN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 11:41 |
| S26 | 12   | ("4122575").PN. OR ("4720884").<br>URPN.  | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 12:08 |
| S27 | 21   | ("3204274"   "3389417"   "3474479"  <br>"3605159"   "3879790"   "4122575"  <br>"4406030"   "4406031"   "4720884"  <br>"4825498"   "4907314").PN. OR<br>("5384929").URPN.  | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 12:09 |
| S28 | 5    | ("3605159").URPN.   | USPAT                                     | OR | ON | 2007/07/09 12:13 |
| S29 | 5    | ("3389417").URPN.   | USPAT                                     | OR | ON | 2007/07/09 12:23 |
| S30 | 9    | ("3389417"   "3403418").PN. OR<br>("3602934").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON | 2007/07/09 12:24 |
| S31 | 1    | ("1415600").URPN.   | USPAT                                     | OR | ON | 2007/07/09 12:34 |
| S32 | 7    | ("864544").URPN.  | USPAT                                     | OR | ON | 2007/07/09 12:35 |
| S33 | 1153 | S7 and (slot slit groove)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR | ON | 2007/07/09 12:36 |